

8.5 C Periodic Table - Interpret the arrangement of the periodic table, including groups + periods, to explain how properties are used to classify elements.

Groups (Family) ↑ Columns  
↓  
1a → 8a

Valence e <sup>-</sup>		most reactive
1	1a - Alkali metals	→
2	2a - Alkali Earth metals	
3	3a - Boron Family	
4	4a - Carbon Family	
5	5a - Nitrogen Family	
6	6a - Oxygen Family	
7	7a - Halogen Family	→ most reactive
8 (except He - 2)	8a - Noble Gases	→ STABLE

Periods ← → Rows  
describes # of electron shells (layers)

eg - Period 1 has 1 electron shell

# Metals, Metalloids, Nonmetals

Physical  
Characteristics

Shiny  
good conductors  
of heat &  $e^-$

malleable  
(can be shaped)

usually solid  
at room temp

Chemical  
Characteristics

left side  
lose  $e^-$

characteristics  
of  
both

dull  
not good conductors

brittle

gases or liquids

right side  
gain  $e^-$   
or  
share  
 $e^-$

Nonmetals - Organic compounds -  
always have  
carbon

SPONCH

sulfur  
phosphorus  
oxygen  
nitrogen  
carbon  
hydrogen